



# UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	
09/000,824	12/30/97	AMARASEKERA		J	60SI-1890
- IM52/1030			$\neg$	EXAMINER	
MICHELLE BUGBEE GENERAL ELECTRIC COMPANY ONE PLASTICS AVENUE PITTSFIELD MA 01201				LU.C	
				ART UNIT	PAPER NUMBER
				1713	23
				or a male of	10/30/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

DTO 000 /000 0/05

Application No.

09/000,824

Applicant(s)

Amarasekera et al.

Office Action Summary Examiner

C. Caixia Lu

Art Unit 1713

The MAILING DATE of this communication appears	on the cover sheet with the correspondence address					
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE3 MONTH(S) FROM  THE MAILING DATE OF THIS COMMUNICATION.						
communication Failure to reply within the set or extended period for reply will, by	ation.					
Status						
1) Responsive to communication(s) filed on Aug 7, 20	001					
2a) ☑ This action is <b>FINAL</b> . 2b) □ This act	tion is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.						
Disposition of Claims						
4) X Claim(s) 1-32	is/are pending in the application.					
4a) Of the above, claim(s)	is/are withdrawn from consideration.					
5)  Claim(s)	is/are allowed.					
6) 💢 Claim(s) <u>1-32</u>	is/are rejected.					
7) Claim(s)	is/are objected to.					
8)	are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are	objected to by the Examiner.					
11) The proposed drawing correction filed on	is: a)□ approved b)□ disapproved.					
12) The oath or declaration is objected to by the Exam						
Priority under 35 U.S.C. § 119						
13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).						
a)  All b)  Some* c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No.						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>*See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).						
Attachment(s)  15) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).					
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)					
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20) Other:					

Art Unit: 1713

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. Claims 17-32 are rejected under 35 U.S.C. 102(a) as being anticipated by Matsushita et al. (EP 0 787 772) for the same rationale as set forth in the previous office action.

# Claim Rejections - 35 USC § 103

2. Claims 1-24 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dams (US 4,355,129) in combination of Milbert (US 3,821,140) and Milbert for the same rationale as set forth in the previous office action.

## Response to Arguments

3. Applicant's arguments filed on August 7, 2001 have been fully considered but they are not persuasive.

A. Response to the arguments that (1) Dams does not disclose use of a coupling agent present in an amount effective to act as a surface modifier for the reinforcing filler and the anti-tracking agent and preferably also as a cross-linker for coupling between said reinforcing filler and said anti-tracking agent with the polymer.

Dams excessively teaches the following:

properties. Methods for modifying the surfaces of fillers employed in organopolysiloxane elastomers are well-known in the art and include the pretreatment or in situ treatment of the filler with a variety of organosilicon products, for example methyl chlorosilanes, vinyl alkoxysilanes, hydroxyl-containing methylsiloxanes and phenylsiloxanes, silanols e.g. diphenyl silanediol, cyclic siloxanes, silylamines and silazanes e.g. hexamethyldisilazane and tetramethyldivinyldisilazane. It is normally preferred that the treatment of the filler be carried out in situ, that is by incorporating the treating agent per se into the curable composition.

Art Unit: 1713

at col. 2, lines 38-49, and Dams also teaches that both reinforcing filler (reinforcing silica) and the anti-tracking agent (alumina trihydrate) are fillers (Claim 6). Based on Dams' teaching, a skilled artisan would have understood at the time of the invention that the amount of surface modifier (the coupling agent) such as the vinylalkoxylsilane when used had to be enough to modify both reinforcing filler (reinforcing silica) and the anti-tracking agent (alumina trihydrate) in order to optimize the bonding between the fillers and the siloxane, and the surface modifier would inherently function as a crosslink between the filler and the siloxane because the vinyl and alkoxyl groups of the surface modifier would react with the vinyl group of the siloxane and hydroxyl group on the surface of the filler respectively. Therefore, applicant's assertion that the pretreatment teaching of Dams would result in no treatment of the alumina trihydrate has no bases.

Page 3

B. Response to the arguments that Dams does not disclose a processing fluid.

Applicants have exemplified not limited the processing fluid as a siloxane oil which is caped with hydroxy, allyl and a phenyl group at both terminal end of the siloxane chain on page 6, lines 6-8. As indicated in the previous office action, Dams teaches that the siloxane composition may comprise a polydiorganosiloxane free of vinyl groups, or with the vinyl groups attached to terminal silicon atoms, together with a polydimethylsiloxane having a proportion of vinyl groups attached to non-terminal silicon atoms (col. 2, lines 16-17) and the surface modifying agent such as hydroxyl-containing methylsiloxane and phenylsiloxanes (col. 2, 43-44), those underlined siloxanes read on the limitation of the processing fluid of the instant claims.

Art Unit: 1713

C. Response to the arguments that Dams does not disclose a mold release agent of instant Claim 12.

The instant Claim 12 does not require a mold release agent because the limitation of Claim 12 is the siloxane composition further comprising a mold release agent, a coloring agent, or a heat resistive agent, and Dams does teach at least the coloring agent.

D. Response to the arguments that Milbert does not disclose inclusion of an anti-tracking agent.

First of all, Milbert's teaching of titanium oxide being problematic and optimization the ratio magnesium oxide and rare earth metal hydroxide in a siloxane composition does not suggest that the anti-tracking agent such as alumina trihydrate is incompatible with a siloxane rubber composition. Applicants have not provide any evidence to support such an assertion.

Secondly, as indicated in the previous office action and here again, the alumina trihydrate is used in Dams's siloxane composition to improve the electrical properties of the resulting elastomer. One cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references. In re Keller, 208 USPQ 871 (CCPA 1981).

E. Response to the argument that Milbert teaches the use of platinum catalyst and the compositions with organoperoxide curing agents are distinguishable from addition reaction curing composition utilizing platinum catalysts.

Contrary to applicants' argument, Milbert's siloxane is curing by <u>both platinum catalyst</u> and <u>organoperoxide</u> and such a composition is <u>not excluded</u> by the instant claims.

F. Response to the analysis of Table II.

Art Unit: 1713

First of all, the comparisons are not based on examples of the cited prior art. Secondly, the showing is not commensurate with the scope of the instant claims because broad percentage range of the coupling agent is claimed in the instant claims.

G. Response to inventor Jayamtha Amerasekera's Declaration filed on August 2, 2001 for reducing the practice of the instant application in the United States prior to August 6, 1997.

First of all, inventor Jayamtha Amerasekera has not provided to the Patent Office the "Appendix A" as indicated in the Declaration.

Secondly, the data based on the explanation of the not yet submitted "Appendix A"does not support the whole range of the instant claim 17.

H. The specification does not have full support for the scope of Claims 17-32. Applicants must indicate where in the specification are the supports for Claims 17-32 because those claims are not present in the original disclosure. The rejection is not made this time because the outstanding rejections are still believed to be valid.

#### Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (703) 306-3434. The examiner can normally be reached from 9:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are:

(703) 305-5408 (official)

(703) 305-3599 (official after final)

(703) 305-5885 (unofficial).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

CL Octobor

October 25, 2001

DAVID W. WU SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700